

Increasing Visits to Vaccines.gov

Variations in an ad campaign to drive website traffic

Agency Objective To determine the relative effectiveness of different messaging to increase site visits to a Vaccines.gov page that informs pregnant women of the vaccines recommended during pregnancy.

Background As part of developing a national maternal immunization program, the National Vaccine Advisory Committee, which advises the Assistant Secretary for Health (ASH) at the Department of Health and Human Services, identified areas to strengthen maternal immunization programs and increase uptake of recommended vaccines among pregnant women. The first recommendation focuses on enhancing communications: “the ASH should encourage the use of current and newly emerging communication tools to maximize the effectiveness and reach of communication efforts addressing the clinical benefits of maternal immunization.”¹ As such, the National Vaccine Program Office (NVPO) developed an advertising campaign aimed at increasing site visits to Vaccines.gov, an informational website operated by NVPO.

Program Change The Office of Evaluation Sciences (OES) worked with NVPO to craft variations of a Facebook ad that targeted pregnant Facebook users. The ads informed users that “Getting vaccines during pregnancy is the best way to protect [expecting moms and their] babies from getting the flu and whooping cough.” The ad also provided a link to a Vaccines.gov page that provides information about the types of vaccines recommended for pregnant women and when each vaccine is recommended during the pregnancy, and provided a calendar widget to set a reminder of when to get vaccinated.

Four variations of the ad were developed, in

¹ [The National Vaccine Advisory Committee: Reducing Patient and Provider Barriers to Maternal Immunizations](#): Approved by the National Vaccine Advisory Committee on June 11, 2014. (2015). *Public Health Reports*, 130(1), 10–42.

which the text and image both varied to focus on either the baby only, or the baby and expecting mom. The four conditions were: (1) Baby-only message with baby-only image (pictured), (2) Baby-and- mom message with baby-only image, (3) Baby-only message with baby-and-mom image, and (4) Baby-and-mom message with baby-and- mom image.

NVPO contracted a marketing vendor to purchase digital ads on Facebook. The ads were targeted at women ages 20-34 whom Facebook identified as interested in certain pregnancy-related groups and businesses.

Evaluation Methods Facebook users were randomly assigned to one of the four conditions based on their zip code. The two-by-two design allows comparisons across each of the four groups, across text variations or image variations, or across congruent and incongruent ads (i.e., where the text and the image align).

The digital ad campaign ran until it reached 250,000 impressions per condition.² The campaign reached 1,000,000 impressions across four conditions in roughly two weeks.



² Impressions are the point in which an ad is viewed once by a visitor, or displayed once on a web page.

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The primary outcome is the click-through rate (clicks per impression) and unique click-through rate (clicks per individual) between the two congruent conditions: baby-only messaging and image, and baby-and-mom message and image.

Results We did not observe any statistically significant differences between the ad variations. The difference between click-through rates for baby-only and baby-and-mom congruent ads is not statistically significant ($p=0.78$, 95% CI [-0.0002, 0.0003]). Similarly, the difference between unique click-through rates is not statistically significant ($p=1.0$, 95% CI [-0.0004, 0.0004]). The baby-only condition had a click-through rate of 0.15, and the baby-and-mom condition had a click-through rate of 0.16. Both conditions have a unique click-through rate of 0.26. One secondary outcome had statistically significant differences across conditions: Post “likes” via Facebook were 147 in the baby-only image conditions, and 37 in the mom-and-baby image conditions (0.037%, $p < 0.01$, 95% [0.0003, 0.0005]).

Conclusion Because the ad campaign targeted impressions rather than click-through-rates, the lower-than-expected click-through rates made it particularly unlikely that we would detect differences between ad variations. Similar ad campaigns may consider targeting click-through-rate rather than impressions. Future work to determine the relative effectiveness of baby- or baby and expecting mom-centered messaging to encourage vaccine uptake among pregnant women may be better addressed in other settings.